

Claims:

1. A fusion polypeptide which comprises an AAV2 Rep protein sequence of the left open reading frame of the rep gene that lacks a functional nuclear localization signal sequence and a polypeptide sequence that confers nuclear localization on said fusion polypeptide.
2. A fusion polypeptide of claim 1, wherein said nuclear-localization-conferring polypeptide sequence is selected from the group consisting of Drosophila antennaepedia protein, HIV-1 tat protein, VP22, and functional fragments and variants thereof.
3. A fusion polypeptide of claim 1, wherein said nuclear-localization-conferring polypeptide sequence is selected from the group consisting of VP22 and functional fragments and variants thereof.
4. A fusion polypeptide of claim 1, wherein said Rep protein sequence contains a deletion mutation in the nuclear localization signal.
5. A fusion polypeptide of claim 1, wherein said Rep protein sequence is truncated to delete the carboxyl terminal amino acid residues of the Rep protein at amino acid residue 492.
6. A fusion polypeptide of claim 1, wherein said Rep protein sequence is truncated to delete the carboxyl terminal amino acid residues of the Rep protein at amino acid residue 491.

7. A fusion polypeptide of claim 1, wherein said Rep protein sequence is truncated to delete the carboxyl terminal amino acid residues of the Rep protein at amino acid residue 490.

8. A fusion polypeptide of claim 1, wherein said Rep protein sequence is truncated to delete the carboxyl terminal amino acid residues of the Rep protein at amino acid residue 489.

9. A fusion polypeptide of claim 1, wherein said Rep protein sequence is fused to the carboxyl terminus of said nuclear localization polypeptide sequence.

10. A fusion polypeptide of claim 1, wherein said Rep protein sequence is fused to the amino terminus of said nuclear localization polypeptide sequence.

11. A fusion polypeptide of claim 1, which further comprises a spacer of about 4 to about 7 amino acid residues between said Rep protein sequence and said nuclear localization polypeptide sequence.

12. A DNA construct encoding the fusion polypeptide of claim 1.

13. A DNA construct of claim 13 which further comprises a promoter.

14. A method for mediating site-specific integration of a rep-deleted rAAV vector to a cell which comprises transfecting said cell with a DNA construct of claim 13.

15. A method for mediating site-specific integration of a rep-deleted rAAV vector to a cell which comprises expressing a fusion polypeptide of claim 1 in said cell.

16. A method for mediating site-specific integration of a rep-deleted rAAV vector to a cell which comprises contacting said cell with a fusion polypeptide of claim 1 during transfection of said cell with said rep-deleted rAAV vector.